ABSTRACT OF THE DISCLOSURE

A method for permitting a network element to transmit to a second network element a message over a link, that identifies a tunnel segment occupying predefined proportion of the data transport on the link, and a status of the tunnel, so that each tunnel may be provided with independent protection switching messaging involves providing an identifying scheme for locally identifying the tunnels passing through the tunnel segment. In order to permit this information to be sent over existing (narrow) automatic protection switching (APS) channels, the identifying scheme only provides a local identifier of the tunnel. To permit extended messaging to include messages that do not fit in a single K-byte overhead, extension bits are used to identify continuation of a message across multiple frames.